AMENDMENTS TO THE CLAIMS

In the Claims:

Please amend Claims 1-7. Please add new Claims 8-20. A complete copy of the claims including marked-up versions of each claim that is amended in this Amendment appears below.

1. (Currently Amended) An electronically controlled valve assembly, comprising:

a valve housing having at least one fluid input and a fluid output, said valve housing also having at least one valve cartridge orifice located intermediate said at least one fluid input and said fluid output;

a valve cartridge including a valve, wherein said valve cartridge may be removably installed in said at least one valve cartridge orifice in said valve housing to control the passage of fluid between said at least one fluid input and said fluid output; ~~and~~

a motor which is removably coupled to ~~the~~ said valve in said valve cartridge to control movement of ~~the~~ said valve in said valve cartridge in response to an electronic control ~~signal.~~ signal; and

a controller for providing an electronic control signal to said motor to operate said motor in response to a sensor control signal from a sensor, said controller being operable to cause said motor to drive said valve in said valve cartridge between open and closed positions in response to the sensor control signal from the sensor.

2. (Currently Amended) ~~The~~ An electronically controlled valve assembly ~~of claim 1~~ as defined in Claim 1, wherein ~~the~~ said valve comprises a ceramic valve insert.

3. (Currently Amended) ~~The~~ An electronically controlled valve assembly ~~of claim 2~~ as defined in Claim 2, wherein ~~the~~ said ceramic valve insert comprises a ceramic disc.

4. (Currently Amended) A method of electronically controlling fluid dispensation, the method comprising the steps of:

providing a valve housing having at least one fluid input and a fluid output, said valve housing also having at least one valve cartridge orifice located intermediate said at least one fluid input and said fluid output;

removably installing a valve cartridge in said at least one valve cartridge orifice in said valve housing, said valve cartridge including a valve to control the passage of fluid between said at least one fluid input and said fluid output;

~~sending an electronic signal from a controller to~~ removably coupling a motor ~~coupled~~ to ~~a~~ said valve in said valve ~~cartridge, the~~ cartridge to control movement of said valve in said valve ~~cartridge including a valve;~~ cartridge; and

~~moving the valve with the motor in response to the electronic~~ providing an electronic control signal from a controller to said motor to operate said motor in response to a sensor control signal from a sensor, said controller being operable to cause said motor

to drive said valve in said valve cartridge between open and closed positions in response to the sensor control signal from the sensor to respectively permit or prohibit fluid flow through ~~the~~ said valve cartridge.

5. (Currently Amended) An electronically controlled fluid dispensing apparatus, comprising:

a valve housing having a fluid input and a fluid output and a valve cartridge orifice located intermediate said fluid input and said fluid output;

an electronically controlled valve assembly including a valve cartridge housing a valve and a motor removably coupled to ~~the~~ said valve cartridge to control at least one aspect of fluid dispensation from ~~the~~ said valve, wherein said valve cartridge may be removably installed in said valve cartridge orifice in said valve housing; and

a controller communicating with the motor to provide electronic instructions for controlling movement of the valve.

6. (Currently Amended) ~~The~~ An electronically controlled fluid dispensing apparatus ~~of claim 5~~ as defined in Claim 5, wherein ~~the~~ said valve comprises a ceramic valve insert.

7. (Currently Amended) ~~The~~ An electronically controlled fluid dispensing apparatus ~~of claim 6~~ as defined in Claim 6, wherein ~~the~~ said ceramic valve insert comprises a ceramic disc.

8. (New) An electronically controlled valve assembly as defined in Claim 1, wherein said valve housing has first and second fluid inputs, fluid from said first and second fluid inputs being mixed in a mixing chamber contained in said valve housing, whereby fluid exiting said valve housing from said fluid output will comprise a mixture of fluids entering said valve housing through said first and second fluid inputs.

9. (New) An electronically controlled valve assembly as defined in Claim 1, wherein said valve housing has two valve cartridge orifices each located intermediate said at least one fluid input and said fluid output.

10. (New) An electronically controlled valve assembly as defined in Claim 9, wherein said two valve cartridge orifices are respectively sized to accommodate two different types of valve cartridges.

11. (New) An electronically controlled valve assembly as defined in Claim 9, wherein one of said two valve cartridge orifices will have said valve cartridge located therein, and wherein the other of said two valve cartridge orifices will be plugged to prevent the flow of fluid therethrough.

12. (New) An electronically controlled valve assembly as defined in Claim 1, wherein said valve cartridge comprises:

a valve cartridge housing having a fluid path located therein, wherein said fluid path will lead between said at least one fluid input and said fluid outlet in said valve housing when said valve cartridge is properly installed in said valve housing;

a disc rotatably installed in said valve cartridge, said disc being rotatable between positions obstructing, partially allowing, or allowing the flow of fluid through said fluid path in said valve cartridge housing; and

an engagement member operatively connected to rotate said disc in said valve cartridge, said engagement member being removably coupled to said motor.

13. (New) An electronically controlled valve assembly as defined in Claim 12, wherein said disc comprises:

a ceramic disc.

14. (New) An electronically controlled valve assembly as defined in Claim 1, wherein said motor comprises:

a DC motor which is operated by electrical pulses supplied by said controller.

15. (New) An electronically controlled valve assembly as defined in Claim 1, additionally comprising:

a sensing chamber for measuring the temperature and/or pressure of fluid passed through said sensing chamber, said sensing chamber being located intermediate said at least one fluid input and said fluid output.

16. (New) An electronically controlled valve assembly as defined in Claim 15, wherein the temperature and/or pressure of fluid measured in said sensing chamber is used to cause said controller to modify its operation of said motor and to thereby modify the operation of said valve by said motor.

17. (New) An electronically controlled valve assembly as defined in Claim 1, additionally comprising:

a user interface to provide control parameters to said controller to thereby effect a modification of the operation of said valve by said motor.

18. (New) An electronically controlled valve assembly as defined in Claim 1, wherein said controller comprises:

control logic; and

a power supply for operating said control logic and said motor.

19. (New) An electronically controlled valve assembly as defined in Claim 18, wherein said controller additionally comprises:

memory for storing control logic used to operate said controller; and

memory for storing operational information such as usage history of said electronically controlled valve assembly.

20. (New) An electronically controlled valve assembly as defined in Claim 1, wherein said electronically controlled valve assembly is used to control the flow of water through a faucet, and wherein said sensor is an infrared proximity sensor mounted on the faucet and used to detect the proximity of a user's hands to the faucet.